

L4 (7.4) Multiplying a Polynomial by a Constant

How would we multiply 2 and $(3x + 1)$?

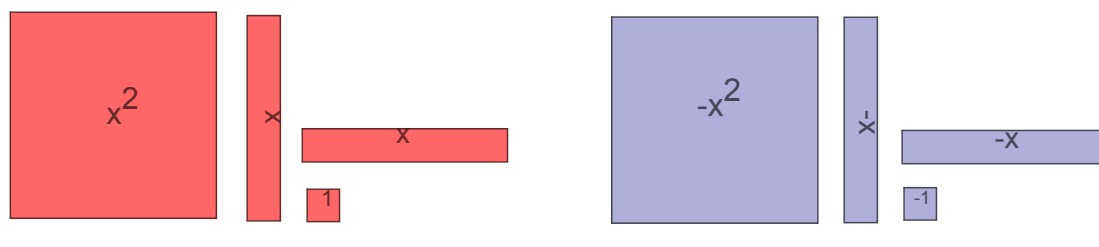
multiply the 2 with everything in the bracket.

What is the answer?

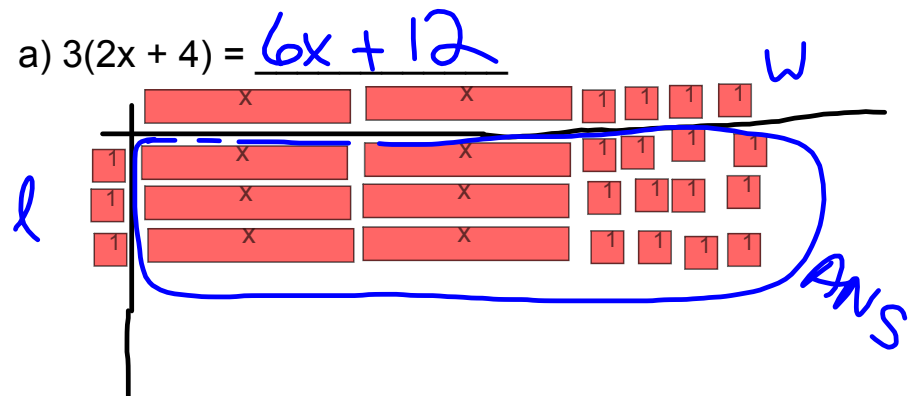
$$= 2(3x+1)$$

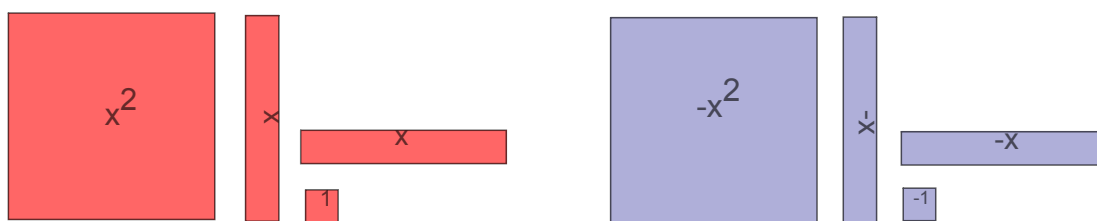
$$= 6x+2$$

Bunny Hops

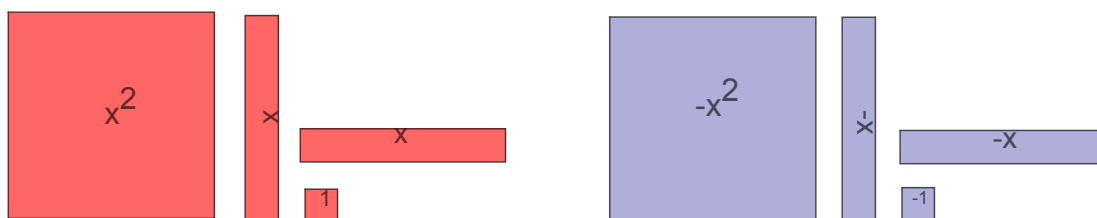
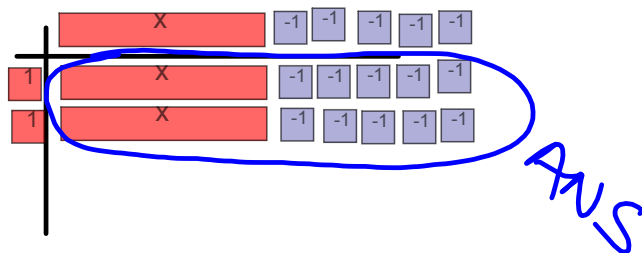


a) $3(2x + 4) = 6x + 12$

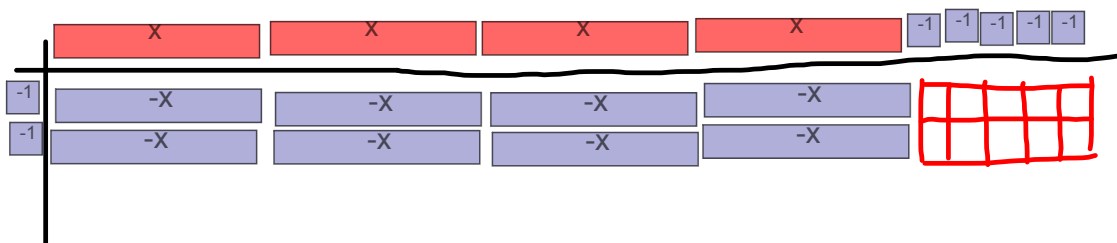




b) $2(x - 5) = \underline{2x - 10}$



c) $-2(4x - 5) = \underline{-8x + 10}$



Ex 2: Find the product without algebra tiles.

a) $2(x - 3)$

$$= 2x - 6$$

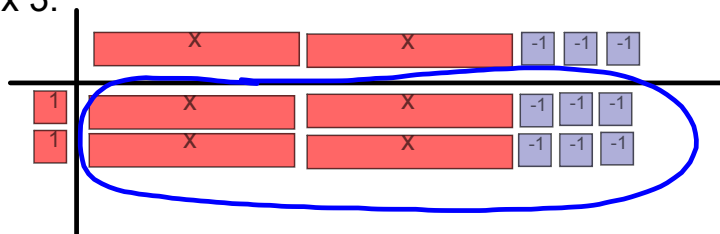
b) $4(2x^2 - 3x + 5)$

$$= 8x^2 - 12x + 20$$

c) $-5(4 - 3x^2)$

$$= -20 + 15x^2$$

Ex 3:



Write the product being modelled above.

$$= 4x - 6$$

Assigned Work:

p.271-272

1bc, 2bc, 3bc, 6, 7, 8